

REMARKS

Claims 1-34 are pending in the application with claims 1, 10, 21, 27, and 31 being the independent claims. Claims 1, 3, 4, 9, 10, 12, 13, 21, 23, 24, 27, 28, and 30 are amended. Claim 34 is new.

Abstract

The Examiner objected to the Abstract for reciting the word “disclosed” in two places. By this Reply, Applicants have amended the abstract to remove those recitations. Accordingly Applicants respectfully request that the Examiner withdraw the objection.

U.S. Patent No. 6,604,305 to Koch

The Office Action rejected claims 1-33 as being anticipated by U.S. Patent No. 6,604,305 to Koch. Koch discloses a method and apparatus for controlling an extendable stick on a work machine. The method includes a coordinated control mode that provides a means for moving the stick and extendable stick in a coordination so that the movement of the stick and extendable stick is provided in one uniform motion. See Koch, column 5, lines 22-26. A map shows that as the stick cylinder extension increases, the extendable stick cylinder extension decreases. See Koch, column 5, lines 43-48.

However, Koch does not anticipate any of claims 1-33 because Koch does not disclose all the features of any of claims 1-33. For example, Koch does not disclose a method of controlling a work machine arm as recited in claim 1, with all its recited features, including changing the extension amount of one or more of the series of hydraulic cylinders based on a pre-selected priority of movement. The term “a pre-selected priority of movement” is defined in the specification as follows:

For the purposes of this application, the term “pre-selected priority of movement” refers to a hierarchy of movement where the relative position of one or more of the hydraulic cylinders 112, 114, 116, 118 is changed only after another of the hydraulic cylinders 112, 114, 116, 118 is extended or retracted beyond a pre-designated position or amount. Accordingly, the pre-selected priority of movement prioritizes the movement of the boom cylinder 112, the stick cylinder 114, the E-stick cylinder 116, and the work implement cylinder 118. The cylinder with the higher priority is moved to or beyond a certain point before moving a cylinder with lower priority.

See Specification, paragraph 18.

Koch does not disclose any method or system having a pre-selected priority of movement because Koch discloses simultaneous and coordinated movement of both a stick and an extendable stick. Because the movement is coordinated to occur simultaneously, the movement does not provide a pre-selected priority of movement, which refers to a system of movement where the relative position of one hydraulic cylinder changes only after another hydraulic cylinder is extended or retracted beyond a pre-designated position. Because Koch discloses a system of simultaneous and coordinated movement, it does not operate based on a system of pre-selected priority of movement as disclosed in the present application and as recited in claims 1-33. Therefore, claims 1-33 are not anticipated by Koch. Applicants respectfully request that the rejection be withdrawn.

U.S. Patent No. 5,116,980 to Rocke

The Office Action also rejected claims 1-33 as being anticipated by U.S. Patent No. 5,116,980 to Rocke. Rocke discloses an automatic excavation control system and method that includes a boom, stick, and bucket. A processor receives a position signal

and compares the signal to a plurality of position setpoints. A logic device produces a command signal to perform a work cycle.

However, Rocke does not anticipate any of claims 1-33 because Rocke does not disclose all the features of any of those claims. For example, with respect to claim 1, Rocke does not disclose a method of controlling the movement of a work machine arm that includes, among other things, a “pre-selected priority of movement configured to extend or retract a stick cylinder of the series of hydraulic cylinders beyond a pre-designated position before changing an extension amount of an extendable stick cylinder of the series of hydraulic cylinders.” Instead, Rocke discloses a programmed work cycle that operates a boom, a stick, and a work implement. The work cycle in Rocke does not operate an extendable stick cylinder using a pre-selected priority of movement, as required by each of independent claims 1, 10, 21, 27, and 31.

Further, each of dependent claims 2, 3, 11, 12, 22, 23, 29, 30, 32, and 33, among other claims, recites that the extension of one cylinder is allowed only after another cylinder is substantially fully extended or retracted. Rocke does not disclose any such limitation in its programmed work cycle. Therefore, Rocke does not anticipate these claims. Accordingly, in addition to being allowable by virtue of their dependency, these claims, in their own right, should also be allowable over the cited art.

Original claim 31

Applicants note that original claim 31 recites an extendable stick cylinder, an extendable stick, and the pre-selected priority of movement discussed above. Neither Koch nor Rocke discloses all these features. Therefore, for at least this reason, the Office Action failed to establish a *prima facie* case of anticipation with regard to claim 31

and any other claim reciting these features. Because the Office Action failed to establish a *prima facie* case of unpatentability with regard to many of claims 1-33, including independent claim 31, Applicants respectfully request that the next Communication from the U.S. Patent and Trademark Office indicate that those claims are allowable or that the Office Action be a non-final Office Action.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims. Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: December 29, 2004

By:

A handwritten signature in black ink, appearing to read "Dustin T. Johnson", written over a horizontal line.

Dustin T. Johnson
Reg. No. 47,684